

## ABSTRACT

$N^+$ -type semiconductor regions 12d are formed on a front surface side of a  $p^-$ -type layer 12c of a semiconductor substrate 12, and these  $n^+$ -type semiconductor and  $p^-$ -type semiconductor constitute photodiodes. A metal wire 14 electrically connected to an isolation region 12e is formed on a first insulating layer 13. The metal wire 14 is provided so that its edge covers pn junction portions (interfaces between  $p^-$ -type layer 12c and  $n^+$ -type semiconductor regions 12d) exposed on a light-incident surface of the semiconductor substrate 12 ( $p^-$ -type layer 12c), above the pn junction portions, and is of grid shape. The metal wire 14 is grounded and the isolation region 12e is set at the ground potential.